**Group Discussions**

**Key characteristics of Ghana**

1. Agro-ecology-Rain-fed Systems; Rain starts May/June through Sept. (Unimodal rainfall).
2. Majority of farmers are small scale subsistence farmers with the majority of farmers with less than 1 ha. With crop-livestock integrated systems (mainly small ruminants, poultry);
3. Farming Systems: Cereal-legume systems with legumes including groundnuts and cowpea; Rice, Maize and Millet; Roots and tubers: Yams
4. Poverty, food and nutrition insecurity is prevalent in most HHs mainly between March-July; women, children and the elderly are most impacted
5. Vegetable cultivation (irrigated farming) could help youth in supplemental nutrient deficiencies
6. The soils are predominantly low soil fertility with limited SOM and a restricting layer at about 1 m predominantly with flat slopes, limited vegetation cover (due to bush fires) resulting in high soil erosion

**Key challenges:**

SI: Increase productivity per unit area with a lower footprint on the environment:

**Socio-economic**

1. Diversification could be a challenge in the context of land tenure
2. Technologies: Limited access to new knowledge: inputs: seeds, fertilizers and
3. Markets are not existent
4. Affordability of technologies
5. Lost confidence in the technologies being marketed
6. Cultural barriers to improved food habits
7. Policies and institutions: Lack of appropriate policy direction, problems with implementation of policies e.g. market friendly opportunities
8. There is limited integration related to crop-livestock domains
9. Limited and lack of value addition: Linked to policy, knowledge and resources
10. Limited interest of youth in Agricultural activities

**Biophysical**

1. Erratic nature of rainfall, climate variability and Climate change
2. Declining soil fertility
3. Erosion and decline in vegetation cover
4. Natural resources degradation: soils, water and vegetation

**Key opportunities:**

1. An increase in population presents market opportunities that are not tapped into
2. Some technologies are available to address climate change constraints e.g. DTMA, cowpeas; Phase I identified some improved technologies that can be developed e.g. early maturing maize and others
3. Strip cropping, Rain water harvesting technologies are not being exploited
4. Critical mass of NGOs, private Sector and SADA to provide input on Agriculture needs
5. Donor interest in the Region needs to be capitalized on;
6. Opportunity for people to work in partnerships and their willingness is important. E.g. Ext agents, Ministry of health;
7. Taking advantage of existent ICT tools for communication, allow for automated irrigation that reduces drudgery; availability of small scale mechanized operations.